

REMARKS

Claims 1-10 and 32 are now pending in the application. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 112

The specification stands objected to for certain informalities. The undersigned has made minor amendments to claim 1 that are believed to remove any ground as to ambiguity of the scope of the limitations recited in claim 1. Therefore, reconsideration and withdrawal of this objection are respectfully requested.

REJECTION UNDER 35 U.S.C. § 102

Claims 1-10 stand rejected under 35 U.S.C. § 102(b) as being anticipated by "Heuristic Procedure", which was attached as reference "U" on PTO-892 Form (hereinafter referred to simply as "Heuristic"). This rejection is respectfully traversed.

Initially, minor amendments have been made to claim 1 to even more positively point out the subject matter being claimed. Specifically, claim 1 has been amended to more positively recite the grouping operation, and that each of the subproblems is defined by one of the objects having the same original origin and destination. Specifically, claim 1 has been amended as follows:

...grouping the objects in the disruption specification to be rescheduled into subproblems, wherein each said subproblem is defined by each one of the objects ~~object~~ therein having the same original origin and destination....

Heuristic does not disclose or even suggest a method as now set forth in amended claim 1. Heuristic is largely a discussion of the variables and limitations that must be considered in aircraft rescheduling systems and methods, with little specifics as to specific methods or systems for achieving specific rescheduling solutions. Heuristic also appears to be concerned primarily with the reassignment of aircraft to specific flights. As discussed on page 4 of Heuristic, it is explicitly stated that:

The primary decision that has to be made is the reassignment of aircraft to flights, within the confines of crew availability, the number of landing slots at a given station, and the level of ground resources.

Further discussion on page 4 of Heuristic explains how using the tail number of the aircraft helps to form a "path based formulation" to assign an aircraft to a predetermined sequence of flights. However, the method of claim 1 is directed to initially grouping "objects" of a given problem into "subproblems", as called for in paragraph 3 of the body of claim 1. Each specific subproblem is further defined as being made up of those objects having the same origin and destination. This is fundamentally different from the scenario described in Heuristic, where the problem being considered is how to route a given airplane most efficiently. In claim 1, for example, the "objects" may be passengers on a given aircraft, and each subproblem would therefore be comprised of those passengers having the same destination and origin. However, the Examiner will appreciate that this methodology could be applied to any other scenario (i.e., not necessarily to a commercial aircraft scenario) where a plurality of objects associated with a larger system or device need to be categorized and analyzed according to some common factors. Essentially, however, Heuristic does not describe or suggest defining a number of "objects" into specific subproblems, where each of the objects in a given subproblem have a common origin and

destination.

Heuristic also does not disclose or suggest the operation of subparagraphs 5 and 6, involving *"identifying a subclass of objects that are unsuitably rescheduled in the initial solutions"* and *"applying a second algorithm for rescheduling the subclass that allows varying the original itinerary to generate rescheduling solutions for the subclass"*. At most, Heuristic merely discloses a list of considerations that must be taken into account when trying to determine whether a particular aircraft can be reassigned to fly a new flight sequence (page 5), as well as some algorithms that may be used to consider specific factors in deciding on a specific reassignment (page 6; "aircraft utilization", "crew availability", "ATC slot allocation", etc.). Again, the Examiner will appreciate that there is nothing in Heuristic that discloses or suggests the specific operations set forth in subparagraphs 5 and 6 of claim 1.

It will be noted that new claim 32 has been added which positively recites applying a third algorithm that is used in an operation on the rescheduling solutions created by the second algorithm. In particular, the last paragraph of claim 32 includes:

...applying a third algorithm to said rescheduling solutions to remove selected ones of said rescheduling solutions, to recreate a set of optimal rescheduling solutions.

The last paragraph of claim 32 has been added to more specifically call out the operation of "applying a third algorithm" to the rescheduling solutions (i.e., the solutions obtained using the second algorithm), to remove selected ones of the rescheduling solutions, to create a set of optimal rescheduling solutions. Again, there is absolutely nothing in Heuristic that would disclose or suggest using a third algorithm to further selectively remove certain ones of rescheduling solutions determined from the use of a

second algorithm. Heuristic simply gives no specifics that even remotely disclose the level of operational specifics recited in new claim 32.

For all of these reasons, reconsideration and withdrawal of the rejection of independent claim 1, based on Heuristic is respectfully requested. Furthermore, since all of the remaining claims 2-10 depend directly or indirectly from claim 1, it is believed that all of these claims are also now in allowable form, and therefore allowance of these claims is most respectfully requested as well. New claim 32 is also believed to be presently in allowable form, and allowance thereof is most respectfully requested as well.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

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